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MINERAL INDUSTRY SURVEYS

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TIN IN AUGUST 1996

Domestic consumption of primary tin in August was estimated by the U.S. Geological Survey (USGS) to be about 2% higher than in July and about the same as in August 1995.

The *Platt's Metals Week* composite price for tin was $4.09 per pound; slightly lower than in July and 11% lower than in August 1995.

In the United Kingdom (UK), South Crofty Holdings Ltd. announced that it had completed a major operational review of its South Crofty tin mine in Cornwall, UK, and now expects the mine to return to profitability in the near future. South Crofty Holdings, which acquired the UK's last remaining tin mine in 1994, raised $9 million in 1995 to fund an improvement program at the mine site after a lack of capital prevented mine management from developing additional ore reserves. Late in 1995, an unexpected variability in ore grade had an adverse impact on the mine's production levels. Following an extensive diamond drilling program, production levels are now increasing, with a resultant decrease in unit production costs. The tin grade at the mine currently averages 1.6% compared to 1.2% in 1995, and mill recoveries have increased to 90% from 87% last year. The company expects tin production in 1996 to exceed 1995's total by about 7%. The mine's management believes the most important factor affecting the mine's profitability is the world tin price, which they note has been increasing for most of the past 2 years.[1]

In Indonesia, it was reported that P. T. Tambang Timah increased its production of tin-in-concentrate by 7%, to 18,800 tons, in the first half of 1996 compared to production in the same period of 1995. Out of this total, 9,900 tons was produced at its inland operations and 8,900 tons by its offshore dredges. Timah's output of refined tin for the first half of 1996 increased by 10%, to 18,500.[2]

Also in Indonesia, it was announced by Renison Goldfields (Australia) that its P.T. Koba Tin operation in Indonesia was able to increase its tin ore production by 32% in the first half of 1996 compared to production in the first half of 1995. Goldfields attributed the increase mostly to the commissioning of its Bemban dredge at the start of 1996.[2]

In Peru, it was reported that Minsur's new $24 million tin smelter is now believed to be in production, having encountered start-up problems since it was commissioned earlier this year. But reports indicate that the tin purity may still be somewhat below the desired 99.85%. The smelter's annual capacity is 15,000 tons of refined tin. There is a possibility that refined tin annual capacity will be expanded to 20,000 tons. Since Minsur anticipated possible start-up problems, it did not pre-sell any of the smelter's planned output for 1996. Instead, Minsur has relied on existing tolling contracts, primarily with the two custom smelters in Malaysia.[3]

In China, it was reported that the new beverage can plant being constructed near Shanghai by the joint venture firm Shanghai Bao Yi Beverage Can Making Company Ltd. will be China's first major tinplate pop-top can plant. The plant was expected to start production by yearend 1997 and have a capacity of 800 million pop-top cans annually. It would use tinplate produced by Baosteel, which is now constructing a 300,000-ton-per-year tinplate line due for completion by mid-1997. About one third of the output from the new tinplate line would be used to supply the pop-top can facility. Baosteel has a controlling 45% stake in the beverage can plant project and has invested $30 million in the new pop-top can plant. Another local Chinese firm and three European companies (Sollac of France, Hoogovens of Holland, and Maison of Belgium) are the other joint venture partners.[4]

Currently, three other tinplate lines are under construction in China with domestic tinplate demand showing strong growth: At Yi Chang Steel, a 120,000- to 150,000-ton-per-year electrolytic tinning line is due to be commissioned late in 1996; Haikou Tinplate Co. is due to start-up a new 100,000-

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ton-per-year plant on Hainan Island in mid-1997; and another plant is being constructed in Fujian Province by a consortium including Kawasaki Steel (Japan).[4]

In Europe, it was observed that APEAL, the European steel packaging industry group, projected that 21 billion of the 37 billion beverage cans expected to be produced for sale in Europe in 1996 will be made of steel. Major European beverage can makers like Carnaud MetalBox and Continental Can have switched some production lines from aluminum to steel during 1996. Also, a new beverage can plant at Plzen, Czech Republic, has just commissioned a single steel can line. According to a new survey in "The Canmaker" publication, 42 out of 80 operational canning lines in Europe are now using steel feedstock; this compares to 1994, when aluminum claimed 41 lines and steel just 34. Industry observers attribute this recent success to the steel industry's sharpened marketing strategy and its improved cost competitiveness compared with aluminum.[5]

Also in Europe, reports indicate that Germany continues to lead the way in the recycling of steel cans. According to figures from the Duales System Deutschland, 64% of tinplate packaging was recycled in 1995. This compared to a 1995 target of 49% and an aluminum recycling rate of 70%. The target for tinplate in 1996 is 72%. The rest of Europe is not nearly so comprehensive in its recycling activities. The overall European Union recycling rate was reported to be 40%. The UK ranked among the lowest, with recycling rates actually declining in 1995, and only 18% of steel cans and 28% of aluminum cans being recycled.[5]

Update

On October 18, 1996, the *Platt's Metals Week* composite price for tin was $3.98 per pound.

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[1]Metal Bulletin. South Crofty Increases Production. No. 8107, Aug. 29, 1996, p. 5.
[2]CRU Tin Monitor. H1 Production Up At Timah and RGC. Aug. 1996.
[3]CRU Tin Monitor. Peruvian Smelter Beginning Production. Aug. 1996.
[4]CRU Tin Monitor. Tinplate News - China. Aug. 1996.
[5]CRU Tin Monitor. Tinplate News - Recycling. Aug. 1996.

TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

		1996		
	1995 p/	July	August	January-August
Production (scrap):				
As tin metal 2/	W	W	W	W
From brass and bronze e/ 3/	10,800	900	900	7,200
Consumption:				
Primary	34,400	3,090	3,140	24,500
Secondary	10,400	836 r/	866	6,900
Imports for consumption, metal	33,200	3,080	NA	NA
Exports , metal	2,790	208	NA	NA
Stocks at end of period	4,580	5,640 r/	4,760	XX
Prices (average cents per pound): 4/				
Metals Week composite	415.61	417.03	409.11	XX
Metals Week New York dealer	294.54	291.56	285.38	XX
London, standard grade, cash	282.00	283.00	277.00	XX
Kuala Lumpur	277.59	279.84	273.59	XX

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

1/ Data are rounded to three significant digits, except prices.

2/ Includes tin metal recovered at detinning and other plants.

3/ Includes tin recovered from copper-, lead-, and tin-base scrap.

4/ Price data from Platt's Metals Week.

TABLE 2
METALS WEEK COMPOSITE PRICE

(Cents per pound)

Period	High	Low	Average
1995 (annual)	473.30	360.15	415.61
1995:			
August	473.30	431.07	458.66
September	434.50	414.20	424.80
October	427.10	410.54	417.19
November	427.16	419.31	425.35
December	427.10	416.42	419.75
1996:			
January	423.56	415.24	418.59
February	417.70	411.89	415.55
March	427.03	405.03	414.71
April	435.05	422.96	429.61
May	436.25	415.30	426.88
June	418.01	410.83	413.65
July	423.04	408.27	417.03
August	411.84	407.75	409.11

Source: Platt's Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Tinplate (all forms)			
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments 2/
1995: p/	205,000	1,660,000	9,600	5.8	2,400,000
1996:					
January	14,200	116,000	729	6.3	179,000
February	16,700	131,000	826	6.3	196,000
March	16,900	144,000	813	5.6	220,000
April	16,100	124,000	790	6.3	202,000
May	16,200	122,000	821	6.7	208,000
June	16,500	137,000	843	6.2	218,000
July	15,700	141,000	857	6.1	231,000
August	14,600	132,000	845	6.4	NA

p/ Preliminary. NA Not available.

1/ Data are rounded to three significant digits.

2/ Shipments data from American Iron and Steel Institute monthly publication AIS10.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	1995	1996		
		June	July	January-July
Imports:				
Metal (unwrought tin):				
Bolivia	6,630	423	476	3,930
Brazil	8,070	899	760	5,240
China	5,610	148	328	2,140
India	146	120	--	336
Indonesia	7,230	580	885	4,170
Malaysia	3,810	--	505	870
Russia	149	19	64	435
Other	1,510	85	66	692
Total	33,200	2,270	3,080	17,800
Other, (gross weight):				
Alloys	11,400	893	910	6,700
Bars and rods	484	38	26	395
Foil, tubes, and pipes	16	--	--	(2/)
Plates, sheets, and strip	468	173	28	630
Powders and flakes	37	--	--	--
Waste and scrap	15,900	634	599	5,110
Miscellaneous	1,470	84	132	653
Total	29,800	1,820	1,700	13,500
Exports (metal)	2,790	302	208	2,580

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

Product	1995 p/	1996						
		July			August			January-August total
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) 2/	W	W	W	W	W	W	W	W
Babbitt	254	21	W	21	21	W	21	159
Bar tin and anodes	77	8	--	8	W	--	W	52
Bronze and brass	1,940	40	81	121	67	124	191	1,240
Chemicals	W	W	--	W	W	--	W	W
Collapsible tubes and foil	W	W	--	W	W	--	W	W
Solder	9,470	518	238	756	534	224	758	5,950
Tinning	689	124	--	124	138	--	138	1,100
Tinplate 3/	9,610	857	W	857	845	W	845	6,520
Tin powder	159	48	--	48	48	--	48	291
White metal 4/	W	W	--	W	W	--	W	8
Other	6,680	571	17 r/	588 r/	587	18	605	4,880
Total reported	28,900	2,190	336 r/	2,520	2,240	366	2,610	20,200
Estimated undistributed consumption 5/	15,900	900	500	1,400	900	500	1,400	11,200
Total	44,800	3,090	836 r/	3,920	3,140	866	4,010	31,400

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."
1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Includes terne metal.
3/ Includes secondary pig tin and tin acquired in chemicals.
4/ Includes pewter, britannia metal, and jewelers' metal.
5/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/ 2/

(Metric tons)

Period	Monthly disposals
1995:	
August	40
September	235
October	110
November	20
December	15
Year total	955
1996:	
January	90
February	450
March	534
April	5
May	10
June	330
July	1,180
August	1,370
Total	3,960

1/ Data are rounded to three significant digits; may not add to totals shown.
2/ These disposals represent only the daily, spot sales program. They do not include the long-term dealer contract sales program.

Source: Defense Logistics Agency.